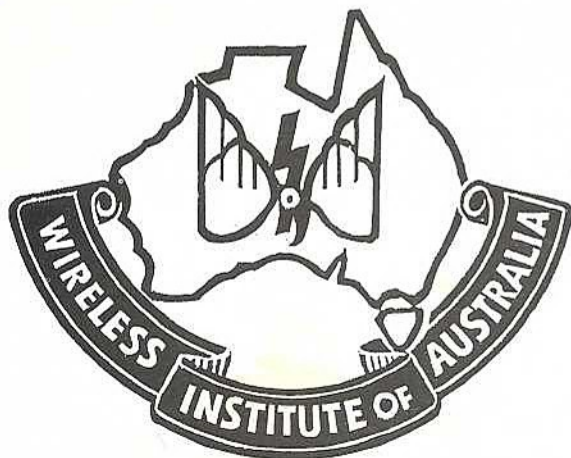
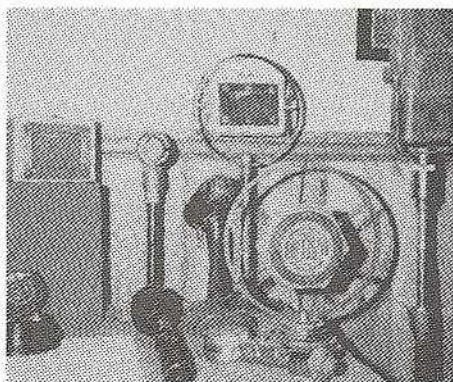


89/06 01



B·A·R·G NEWS

JUNE/89 ✓



© Monthly Newsletter of the
Ballarat Amateur Radio Group

89/06 02

BALLARAT AMATEUR RADIO GROUP INCORPORATED OFFICERS 1988-1989

EXECUTIVE COMMITTEE

			HOME	BUSINESS
President:	JOHN HAZLEDINE	VK3 CFH	39 1971	39 1035
Imm. Past President:	RON WATKINS	VK3 XOA	35 6017	32 1447
Vice President:	GORDON CORNELL	VK3 PUW	39 2427	39 1135
Secretary:	JIM WRIGHT	VK3 CFB	32 7563	
Treasurer:	HARRY HEKKEMA	VK3 KGL	35 7563	39 1001
Asst. Secretary:	GEORGE FOWLER	VK3 DOK	32 6863	39 1954
Publicity Officer:	CLARRY KITZELMANN	VK3 DMK	38 1044	35 7756
Education Officer:	IAN McDONALD	VK3 AXH	41 3717	31 1317
Net Co-ordinator:	FRED QUICK	VK3 KQF	32 3216	
Technical Officer:	DICK ANTOZIEWICZ	VK3 AEX	32 3273	31 1818
Memb. Representative:	NEAL DAVIDSON	VK3 KQQ	35 9612	

OFFICERS AND COMMITTEES

Newsletter Editors:	BOB TERRILL	VK3 BNC	39 5317	39 1001
	HARRY HEKKEMA	VK3 KGL	35 7563	39 1011
Q.S.L. Manager:	JEFF PIGDON	VK3 PAP	32 7041	31 1211
Awards Manager:	MAURIE BATT	VK3 XEX	42 2245	
Property Officer:	DICK ANTOZIEWICZ	VK3 AEX	32 3273	31 1818
Hamfest Convenor:	KEVIN HUGHES	VK3 WN	35 5011	
WICEN Committee:	GORDON CORNELL	VK3 PUW	39 2427	39 1135
	DICK ANTOZIEWICZ	VK3 AEX	32 3273	31 1818
	GEOFF SMITH	VK3 ADB	33 2112	
Technical Committee:	IAN ROBINSON	VK3 BTX	35 8031	
	MAURIE BATT	VK3 XEX	42 2245	
	PHIL SEDDON	VK3 AQM	31 5220	
	MURRAY FELSTEAD	VK3 AAI	41 2234	

B.A.R.G. meets on the LAST FRIDAY in every month except December at the Ballarat Education Centre, Hopetoun St., Ballarat at 7.30 p.m.

Committee meetings are held at the Education Centre on the Wednesday two weeks prior to the Club meeting at 7.30 p.m. Executive committee members are expected to attend and any club member with business for discussion is welcome.

All correspondence to: The Secretary, BARG Inc., P.O. Box 216E, Ballarat East, 3350.

Applications for Awards to: Maurie Batt, RSD, Rokewood Junction, 3351.



CNR. RING RD. & WESTERN HWY BALLARAT
(OPEN 10AM - 5 PM 7 DAYS A WEEK)

FEATURES

- GRAMOPHONES • VINTAGE RADIOS • VISITORS PARTICIPATION
- MEMORABILIA • AUDIO DISPLAYS • DEMONSTRATIONS • CRYSTAL SETS

The "Orpheus Radio Museum" is operated by Richard and Sonja Wilson.
The collection includes their private collection, the 3BA collection and other items on loan to the museum.
The museum is run with the idea of preserving the history of radio in Australia and making it accessible to the public.
If anyone has any information or items of interest to the museum, would they please contact, or write to, the "Orpheus Radio Museum" RSD B98, Ballarat 3352. Telephone (053) 34 2513.
Let the public enjoy your piece of Radio History.

89/06 03

MINUTES OF GENERAL MEETING HELD 26th MAY 1989.

MEETING OPENED by President John at 7.45pm who welcomed the 45 members and visitors in attendance.

APOLOGIES. VK3 PAL, KIT, DS, DMK, PSD, SE, NIZ, KQF.

MINUTES of previous meeting as circulated were confirmed. KGC/CAZ.

CORRESPONDENCE IN WIA Western Zone minutes of 1988 AGM.
Max VK3 ZFR thanking Club for Newsletter.

CORRESPONDENCE OUT WIA Vic Division stating that Club would consider becoming an examining body for NAOCP and AOCP.

TREASURERS REPORT General a/c \$842.47. VS&L a/c \$2196.82. KGL/DOK.

CLUB NET. According to President John it is "Bashing on".

EDUCATION. Ian AXH reported that the classes are proceeding with 5 students.

REPEATERS. Dick AEX gave a lengthy report on the progress of the new repeater for RBA and RBU's Cabinet has been ordered.
Murray AAI reported that the Digital Repeater was going fine until it was Zapped by Lightning. Repairs are in hand.

NEWSLETTER Nothing to report. Material for publication is still needed.

QSL MANAGER Jeff reported that the inwards bureau has closed down and the WIA Vic Division has approached the Club to become a sorting and collection point for our area.
Moved KGC seconded PAP that the Club takes over management of QSL cards for our area. Carried.

WICEN. Gordon KGC reported on a WICEN meeting that he attended at Geelong and he has made application for a 2mtr antenna for Club WICEN use.
A Club WICEN exercise will be carried out on 4th June.

GENERAL BUSINESS. The comments made to Bill PAL re the repeater on BEN NEVIS as reported in last months minutes were incorrect. At present no application for a building permit has been made.

Gordon KGC asked members whether they were interested in having permanent Club rooms in the City area. A show of hands showed that the members were very much in favour and Gordon will negotiate and report at next meeting.

Moved by KGC seconded VEJ that Club hold another HAMVENTION and Kevin WN goes ahead and books usual venue for 29th Oct.

MEETING CLOSED at 8.35pm and the auction of a wide range of gear was ably conducted by George DOK. Profit is not known at this stage.

73s. Jim CFB.

#####

THE ANNUAL GENERAL MEETING WILL BE HELD ON FRIDAY 30th JUNE AND IT IS HOPED THAT ALL MEMBERS WILL MAKE THE EFFORT TO ATTEND.

#####

89/06 04

ANNUAL REPORT

BALLARAT AMATEUR RADIO GROUP 1988-89

I thought we had not had a very busy year until I saw these notes spread out in front of me. We have got through a lot of work and it means, therefore, that the Executive and Officers must have been doing all the work, for I certainly cannot remember organising that much. The group provided public awareness by participating portable at Pax Hill for JOTA and also by putting on a demonstration of Amateur Radio at Dana St Primary School which produced a picture in our local paper, The Courier. We officiated in the two metre communications for the Begonia Classic Fun Run and helped BCAE with their Western District games on one weekend.

For other amateurs, and with other amateurs we had a successful Hamvention in 1988, which I was sad to miss due to an emergency, and members have joined in the John Moyle contest and in a portable capacity. I have attended the Western District meetings at Bolac and the novice course is still proceeding with five members. The club has offered to be an examining body when devolvment of exams starts in 1990. Also we have taken on the task of being the Q.S.L. card distributor for this area. On the technical side we have an active group in packet radio and the technical officers are going to modernize Channel 3, the two metre repeater on Buninyong. An area coverage check was done on Channel 6 at Smeaton & some more experiments are to be done.

We have had fairly intense advise on W.I.C.E.N this year and a guest speaker to that effect, and also a speaker who explained to us about the electronics of the so-called "Bionic" ear, with which Australia leads the world. The junk sale was a usual highlight and otherwise most of our club evenings have been very social, which is mainly their function anyway.

We have some members who are avid D-Xers and card distribution has gone well. The new format of the monthly newsletter has been well received and the editors are to be congratulated for doing a good job every month for it must be trying to squeeze articles out of the members to support the magazine, which is in itself supported by our advertisers. We are grateful for this. The 80 metre net has been running each Thursday evening and has had varied response with sometimes of despondency with few call ins, but there have been some awards distributed, and I think we should continue with this time for B M L on those evenings. I should remind you that during August it is our clubs turn to run the 2 metre net through Mt. William repeater for the Western district section of W.I.A and it seems to me the best way to keep in touch with that body, as the meetings only involve a few people and the 2 metre link up can let more people have their say and give the news from their districts.

In all, the year has gone smoothly and I thank and give credit to the Executive Committee and Officers, and you all know that in no small way Jim, our Secretary is involved, and I thank him personally for looking after me and providing alot of these notes. I wish our new President and his team well for the ensuing year and I offer my support, as you all have given to me.

73 VK3 CFH JOHN



TCM 3105 Modem 89/06 05 for the Digicom > 64

Another modem for the Digicom > 64 TNC Emulator program? Yes! This one is different from Barry W2UP's packet modem (see the August 1988 issue of 73) in that it works exclusively on 10 meters, VHF, and UHF at 1200 baud. It's cheap and very small—so small, in fact, that some Digicom enthusiasts are installing this little jewel inside their Commodores!

The prime mover of this simple modem is a single 16-pin modem IC, the TCM 3105, manufactured by Texas Instruments. This IC, powered by 5 volts, handles all modulation/demodulation functions digitally. You can attach it directly to the cassette port of the Commodore 64 and 128. Because the TCM 3105 consumes little power, you may operate other programs and peripherals concurrently.

Get on 2 Meters Quickly and Cheaply

If you have operated HF packet, you know that the mode is difficult even with expensive interfaces. A tuning aid, such as an oscilloscope or LED bar graph, is necessary. Sophisticated filtering, such as that found in expensive modems, is also desirable. If you're a newcomer to packet, you may not want to get involved in all that at first. For packet newcomers, 2-meters is the place to start, and this modem will get you on there quickly and cheaply.

The idea for this modem came originally from the West German authors of Digicom. In their German program documentation, we include a basic, hand-drawn schematic. Over time, as a result of use and testing, we made additions and modifications. For example, we added front-end audio limiting and a watchdog timer. With the aid of applications engineers at Texas Instruments, they made several circuit modifications to improve the modem's sensitivity.

We came up with the following PC board and construction design to make the Digicom program more accessible to people. We hope that the low cost and ease of construction will encourage more newcomers to join the packet mode.

Assembly

The component layout diagram (Figure 2) shows the PC board parts mounted as they appear on the non-foil side of the board. Hold the PC board up to a light to see the foil traces on the opposite side, and use these traces to guide you in parts placement.

The design uses a right-angle, six-contact card-edge connector (Dale EBT156-6R1W). It's possible to use a regular solder tail connector, as the solder points will line up the bar traces on the PC board. Apply a thick line of plastic cement to the board/connector joint in this case, to prevent the solder tails from

Mini Modem

1200

BAUD

breaking off. The PC card is installed in the Commodore's cassette port, foil side down.

Note carefully the orientation of the IC and ensure that the IC socket is soldered correctly for proper orientation of the chip. Do not install the IC until soldering is complete and the board has been tested for shorts.

When assembly is complete (and before installing the IC), make a continuity check between pin 2(B) of the cassette port connector and the other pins. As you look straight at the computer side of the connector, with the non-foil side of the PC board up, pin 1(A) is at your right and pin 6(F) is at your left. With R9 turned fully counter-clockwise, there should be at least 100kΩ between pin B and the other pins. If there is less resistance, you have a solder

bridge somewhere. Check the entire PC card carefully for solid solder connections and solder bridges.

You will need to make four connections to your transceiver: push-to-talk, microphone, speaker (audio from the transceiver), and ground. You're lucky if you can get audio from the front panel of the rig (as in the new ICOM models) because then you'll need only one cable. If you can get audio only from a separate jack on the rig, then you'll need a separate cable. Join the ground from the audio line with the ground from the MIC/PTT line at the PC card.

If you use an HT with this modem and the HT's PTT circuit is combined with the MIC circuit, then join the two lines from the modem before they reach the jack on the HT. This is normally done with a resistor in the PTT line and a 0.1μF capacitor in the MIC line. The value of the resistor varies with the brand, but 3.3kΩ works with the Yaesu and 30kΩ with the ICOM. If you have a friend

with a TNC, ask him what the directions say for connecting your brand of HT to his TNC. Whatever works for TNCs will work for this modem.

There are some transceivers, particularly those with PTT relays, that won't key up with a small transistor like the one used on the modem board. If you have such a transceiver, you could insert an opto-isolator, such as a TIL-119, in the circuit. This low-cost, 6-pin IC will key transceivers with PTT voltages as great as 100.

Pinout for the TIL-119

1. Connect to pin 2 of the cassette port (5 volts) through a 3.3kΩ resistor.
2. Connect to the PTT pin on the modem header.
3. No connection.
4. Connect to negative side of transceiver PTT circuit.

5. Connect to positive side of transceiver PTT circuit.
6. No connection.

Tuning and Testing

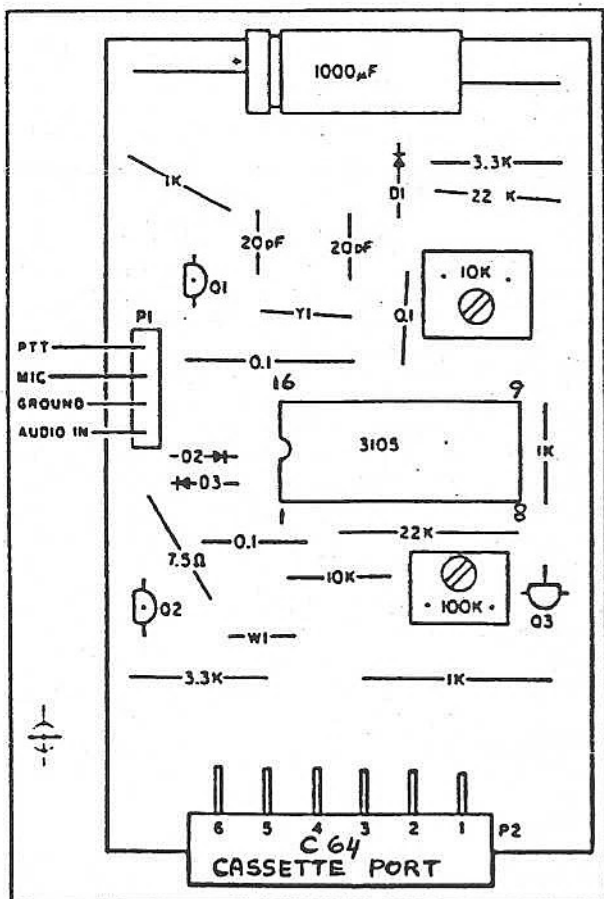
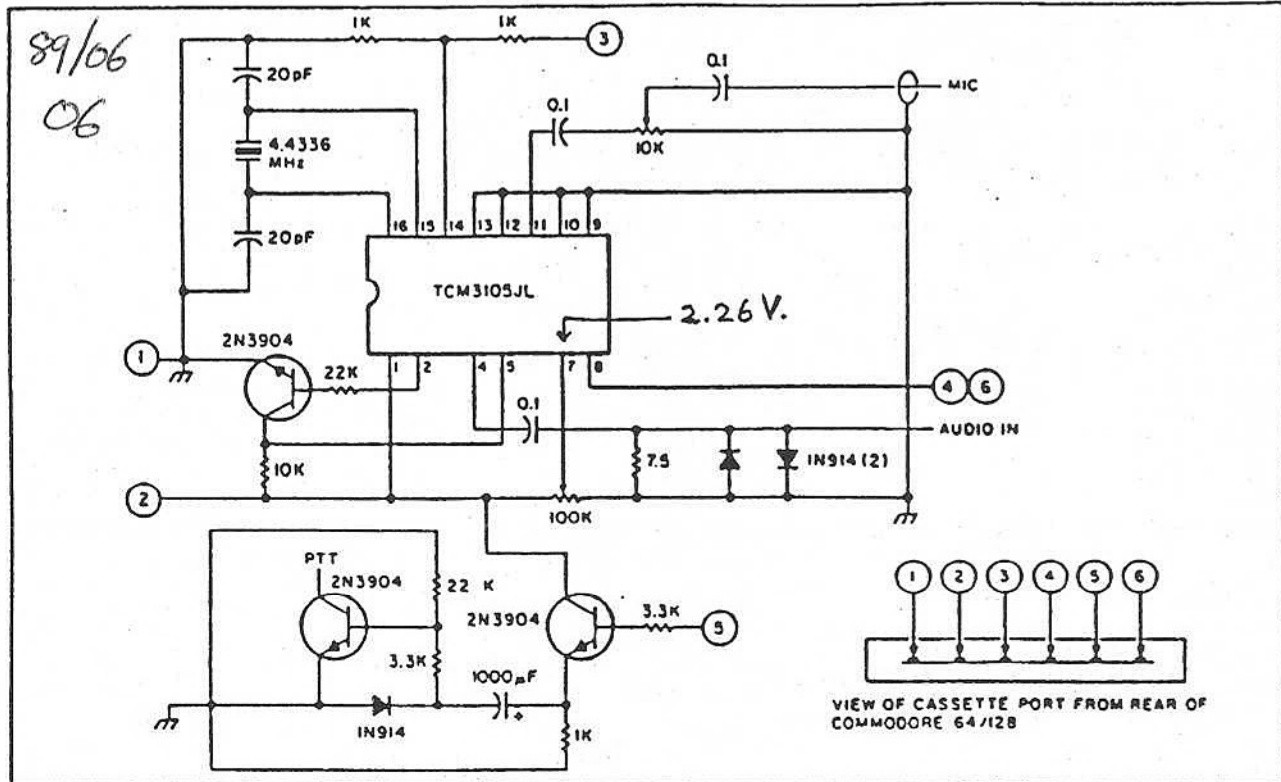
Install the IC chip, correctly positioned, into its socket and install the modem into the cassette port while the computer is off. Turn the computer on and feel the IC chip. If it is warm at all, turn off the power and remove the modem from the cassette port. Recheck the modem for IC orientation, solder bridges, and incomplete connections.

R9 adjusts the receive bias of the TCM 3105JL. The quickest and easiest way to make this adjustment is to boot up the Digicom program when the packet frequency is busy, and adjust R9 until Digicom starts printing data. Of course, you must have the monitor functions of the program turned on. Alternatively, you can adjust R9 for the presence of the correct voltage on pin 7 of the IC chip. With 5 volts applied to the modem, R9 should decode when 2.26 volts are present at pin 7. Digicom doesn't have to be running, but be careful not to short adjacent pins with the voltmeter probe.

R4 controls the AFSK audio output from the modem to the MIC input of your transceiver. You don't want to overdrive your rig so adjust it for the minimum output that will give reliable reception. Send UNPROTO packets via a local digipeater and watch your screen. If you see your rig transmitting, but the digi is not repeating your data, you know the output is too low.

A 30-second watchdog timer incorporated in the modem design should be adequate for any packet transmissions. If longer time-out periods are desired, you may increase the value of C6. However, remember that the sole function of this timer is to drop out the PTT circuit if it is accidentally keyed while you are not present. The longer the time-out period, the greater the chance of frying your rig. Be conservative and go with the shortest time-out period.

REPRINT



TCM 3105 JL
AVAILABLE FROM
ACD ITRONICS
UNIT 2, 17-10 MELRICH RD
BAYSWATER. 3153.
PH. 03 762-7644
AT \$14 + \$7 DEL.

Parts List

Resistors

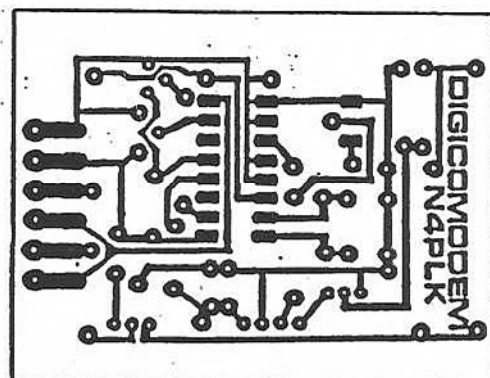
R1	1k	R7	10k
R2	3.3k	R8	22k
R3	2.2k	R9	100k
R4	10k	R10	single-turn pot
R5	1k	R11	single-turn pot
R6	7.5Ω		

Capacitors

Poly, Mylar, or tantalum			
C1	20pF	C4	0.1µF
C2	20pF	C5	0.1µF
C3	0.1µF	C6	1000µF (electrolytic)

Other

D1, D2, D3 1N914 diodes
Y1 4.4336 MHz HC-18 case crystal
Q1, Q2, Q3 2N3904 NPN transistors
U1 TCM 3105JL FSK Modem IC
P1 4-pin header (0.1" spacing)
P2 6-pin card-edge connector (Dale EBT156-6R1W)
W1 wire jumper
16-pin IC socket (PC mount)
Case (if desired)
4-conductor shielded transceiver cable
Audio cable (if required)



Propagation Forecast

89/06 07

THE SOLAR FLUX CONTINUED ITS ROLLER COASTER ACT THROUGH MAY, WITH TWO PRONOUNCED UPS AND DOWNS. THE FIRST PEAK, 208 ON MAY 8TH, HAD NOT BEEN EQUALED SINCE MARCH 29. THE BETTER PEAK, 213 ON THE 21ST, WAS THE HIGHEST SINCE MARCH 24. THESE MANY HIGHS WERE ALMOST LOST IN THE SHADOW OF THE CYCLE 22 HIGH OF 299 ON JANUARY 16, BUT THEY WERE ENOUGH TO PROVIDE GOOD DX OPPORTUNITIES ON ALL BANDS UP THROUGH 28 MHZ. EVEN 50 MHZ IS BECOMING A REAL DX BAND, AND IT WILL DO EVEN BETTER OVER THE NEXT TWO YEARS OR MORE.

FOR THE IMMEDIATE FUTURE THERE WILL BE SOME LOSS OF DX POTENTIAL AS WE MOVE INTO THE NORTHERN HEMISPHERES SUMMER. PROPAGATION WILL ALSO BE INFLUENCED STRONGLY BY FREQUENT AND SUDDEN APPEARANCES OF SPORADIC E SKIP. THIS IS PRIMARILY A SHORT DISTANCE MODE, USEFUL MAINLY ON 28 AND 50 MHZ. AT THE PEAK OF THE SEASON THERE MAY BE MULTI HOP EFFECTS, EXTENDING THE POSSIBLE RANGE TO ABOUT 2500 MILES, OR EVEN MORE.

IN OUR SUMMER THE SEASON REVERSAL FOR STATIONS IN THE SOUTHERN HEMISPHERE TENDS MAKE WORKING THEM EASIER, ESPECIALLY FROM OUR SOUTHERN STATES. THIS IS MOST NOTICEABLE ON 28 AND 50 MHZ IN THE HIGH SOLAR ACTIVITY YEARS. CAREFUL LISTENING FOR 10 METER BEACONS, MOSTLY BETWEEN 28.2 AND 28.3 MHZ IS IMPORTANT. THERE ARE ALSO MANY BEACONS ON 50 MHZ, MOSTLY IN THE FIRST 100 KHZ OF THE BAND.

AMERICAN SUNSPOT NUMBERS FOR MAY 18 THROUGH 24 WERE BETWEEN 153 AND 197 WITH A MEAN OF 177.9.

Bargain Corner

- | | |
|---|--------------|
| 1. STC 151 CARPHONE 25 WATT SOLID STATE SUITABLE FOR CONVERSION TO 2 METRES FM | \$40 |
| 2. STC 131 CARPHONE 3/20 FINAL. ENOUGH BITS TO BUILD A 6 METRE LINEAR. | \$10 |
| 3. 6 METRE TRANSVERTER 70 WATTS OUTPUT. DRIVEN FROM ANY HF RIG ON 28 MHZ. | \$50 |
| 4. 160 METRE TRANSVERTER APPROX 50 WATTS OUTPUT DRIVEN FROM ANY HF RIG ON 7 MHZ. | \$25 |
| 5. HEAPS OF PC BOARDS - PLENTY OF BITS | \$5 THE LOT |
| 6. 6 PANEL METERS OF VARIOUS SHAPES AND SIZES | \$10 THE LOT |
| 7. FET VOLT/OHMMETER - MAY REQUIRE SOME WORK | \$2 |
| 8. POWER SUPPLY 12VDC 0-20VOLTS AT APPROX 1 AMP PLUS 6.3,12,15,18VAC AND 350/700 VOLTS DC | \$3 |
| 9. CAR RADIOS - ALL GOING-12 VOLT, ONE HAS FM, BUY THE LOT OR WILL SEPARATE | \$12 |

Ballarat Amateur Radio Group

VK3BML

P.O. BOX 216E

BALLARAT EAST, VICTORIA. 3350

ANNUAL GENERAL MEETING

Our Annual General Meeting will be held on June 24th at the Ballarat Educational Centre Hopetown Street, Ballarat East, at 7.30 p.m.

As all positions will be declared vacant and nominations required to fill these positions.

Being a financial member of our Club I wish to nominate

[illegible]

DON'T FORGET Page !!!

89/06 09

IMPORTANT NOTICE.

What! This magazine has come a week early. I wonder why?

THE ANSWER.

The next meeting of the Ballarat Amateur Radio Group is the;-

ANNUAL GENERAL MEETING.
ANNUAL GENERAL MEETING.
ANNUAL GENERAL MEETING.

Consequently, it is important that you try to attend.
The club needs YOUR support, so please help.
Besides, if you do not come, someone else might do you in, and you wouldn't be able to defend yourself.

NOMINATION FORM

We wish to nominate for the
position of of B.A.R.G.
for the 1987/88 year.

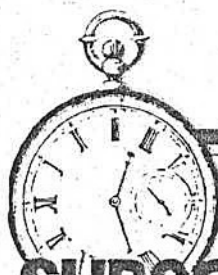
Nominator (Signature) Callsign

Seconder (Signature) Callsign

Signature of person nominated above

Date

* Please forward to the Secretary Jim VK3CFB.



IT'S TIME TO
RENEW YOUR

SUBSCRIPTION

YOUR SUBS. ARE NOW DUE. PLEASE SEE THE TREASURER A.S.A.P. WITH
YOUR MONEY.

89/06 10

Ballarat Amateur Radio Group

VK3BML

MEMBERSHIP FEES 1988-89

MEMBERSHIP FEES BECOME DUE AT THE ANNUAL GENERAL MEETING. PLEASE ASSIST THE CLUB BY PAYING PROMPTLY TO THE TREASURER HARRY HEKKEMA VK3KGL AT CLUB MEETINGS OR BY MAIL TO P.O. BOX 216E, BALLARAT EAST. THE SCALE OF FEES IS AS FOLLOWS:-

FULL MEMBER	\$10.00
FAMILY	\$15.00
STUDENT/PENSIONER	\$ 5.00
LIFE MEMBER	NIL
ASSOCIATE	\$ 7.50

NOTE: ASSOCIATE MEMBERSHIP IS A NEWSLETTER SUBSCRIPTION ONLY.

TO ENABLE ACCURATE RECORDS TO BE KEPT PLEASE COMPLETE THE FOLLOWING INFORMATION AND RETURN IT WITH YOUR SUBSCRIPTION.

NAME _____ CALL SIGN _____

ADDRESS _____

MEMBERSHIP DESIRED FULL/FAMILY/STUDENT-PENSIONER/ASSOCIATE/LIFE

AMOUNT REMITTED \$ _____ DATE _____

89/06 11

INWARDS QSL BUREAU

The Inwards QSL Bureau is operated as a FREE SERVICE TO MEMBERS OF THE VICTORIAN DIVISION. Non WIA members may avail themselves of the service for the payment of an appropriate fee.

HOW TO COLLECT YOUR CARDS

Members of the VK3 Division

1. Firstly you must REGISTER with the bureau by writing to

Inwards QSL Manager
XXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXX

You should provide your NAME and CURRENT CALLSIGN ('S) and nominate a POINT OF COLLECTION from the list of distribution points provided.

2. The Bureau register will be automatically updated annually and you must ADVISE THE BUREAU IN WRITING if you wish to remain on the register, NOT LATER than February 1. If you change your callsign during the year you should notify the bureau immediately.

3. Registration of BLOCKS OF CALLSIGNS may be made by CLUBS WHO ARE RECOGNIZED AS COLLECTION POINTS.

4. Cards, sorted in callsign order will be mailed or delivered to collection points every 90 DAYS at NO CHARGE. Any person or club which is recognized as a collection point may, having made suitable arrangement with the Bureau Manager arrange to collect cards personally at convenient intervals.

5. DIRECT MAILING TO INDIVIDUALS will not be undertaken by the bureau, however some clubs may make this service available to their own members, and members of the Division who reside in remote areas. In this instance suitable arrangement will have to be made with the DISTRIBUTION POINT OR CLUB to cover any mailing cost involved. CHECK with your Club.

6. INCOMING CARDS FOR AMATEURS NOT REGISTERED WITH THE BUREAU will not be sorted into callsign order, however they will be held for collection at the REGISTERED OFFICE of the VICTORIAN DIVISION for a period of 90 DAYS, after which time they will no longer be available. Excessively high charges by Australia Post makes return of cards to senders non viable.

Collection of cards from the DIVISION OFFICE may only be made during normal office hours.

89/06 12

7. In excess of 8,000 cards are processed by the bureau each month, and this makes it IMPRACTICABLE FOR ALL CARDS TO BE INDIVIDUALLY SCRUTINIZED for the date on which the contact was made. Due to the decision by DOTC to immediately reissue callsigns it is possible for several licensees to use the same call sign on air during a year. A CALLSIGN CAN ONLY BE REGISTERED WITH THE BUREAU UNDER ONE HOLDER. If a second person seeks to register the callsign, both the currently registered and subsequent person seeking registration will be advised that the registration is in dispute. No cards under that callsign will be processed until the dispute is settled. Persons seeking to register the same callsign will have to decide who should hold the registration. It is anticipated that such a dispute would be resolved by a mutual arrangement whereby the agreed registration holder will pass on cards received in respect of contacts made by the other party.

CARDS FOR AMATEURS WHO ARE NOT MEMBERS OF THE VK3 DIVISION

Non Members cards can be processed in EXACTLY THE SAME WAY as cards for members, however, as members funds will not be utilized to finance services for others, AN ANNUAL FEE OF \$***** will be payable directly to the Bureau. This fee is applicable in respect of ALL RADIO AMATEURS WHO ARE NOT FINANCIAL MEMBERS OF THE VK3 DIVISION regardless of their membership status with any club.

This fee is payable on February 1 each year, and is on a monthly pro rata basis. Eg. A person first registering with the bureau in September will be required to pay initially for 5 months - \$7.50. On February 1 the Annual fee of \$18.00 will be due.

Sorted cards will not be available in respect of months a person is not registered or in the case of a Non Member is "unfinancial"

Where a Non Member nominates a Club as a Collection point, it will be entirely at the Club's discretion, as to whether it will handle the cards if the person concerned is not a member of that Club. If suitable arrangement cannot be made the Non Member will be required to collect sorted cards from the VK3 Office at the appropriate times.

SPECIAL NOTE FOR CLUBS

Clubs who are registered as COLLECTION POINTS will be required to handle cards for Radio Amateurs who are members of the Division, but who may not necessarily be members of the Club.

All enquiries relating to the operation of the Bureau should be made DIRECTLY WITH THE BUREAU MANAGER.

Packet Radio with Clarry VK3DMK

Subject: 10M 1200BAUD PACKET RADIO WITH BBS AVAIL.

89/06 13

based on info from K3AKK and WA1LBP (both - N4QQ), the following nodes are QRV with connection to VHF/UHF systems and BBS's
28.195 (LSB) K3AF-7 Nr Washington, N700-10 Arizona
28.205 WOLKD

these networks have been established for several yeasss, so I believe they are operating well.

so why not try to work them on the effective "SSB-mode",
I have learned that somebody in Europe is also thinking about similar arrangement on 10M band, but I have not received any reports so far,
LA9OK (- LA8GE) will be looking into the possibilities of 10M operation, possibly with forwarding.

So why not try forwarding on 10M 1200baud to/from USAa instead of using some other less convenient/effective ways with long delays???

73 es good luck in your experiments

jan-martin

LABAK - LA5IV

HR AMSAT NEWS SERVICE BULLETIN 147.04 FROM AMSAT HQ
SILVER SPRING, MD MAY 27, 1989
TO ALL RADIO AMATEURS BT

A Summary Of All Planned Amateur Radio Satellite Launches

Last week Tom Clark (W3IWI) had a chance to talk with Eduardo Dias who is the manager of a satellite tracking station in Santiago Chile. This was one of the tracking stations which supported the launch of the Japanese H-1 rocket that carried FO-12. Eduardo mentioned that the next Japanese launch of their H-1 rocket has been set for January 23, 1990. Eduardo said that he had been contacted by the JARL and asked if he could provide amateur radio support since JAS-2 will also fly on this mission. JAS-2 will be the "follow-on" to FO-12.

At this point AMSAT would like to give a quick "run-down" of all known amateur radio satellite launch activities scheduled for next several months.

SATELLITE -----	LAUNCH DATE -----
RS-12/13	June '89
PACSAT	11/09/89
LUSAT	11/09/89
DOVE	11/09/89
UOSAT D	11/09/89
UOSAT E	11/09/89
JAS-2	01/23/90

PRINTERS

GENERAL & COMMERCIAL

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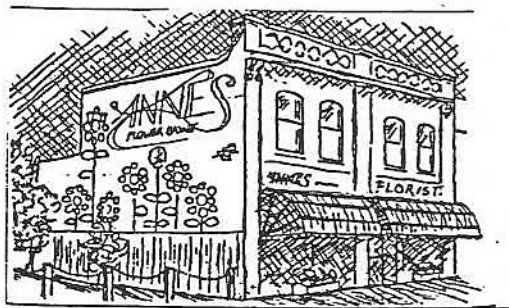
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